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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/529,365	06/13/2000	CHRISTOPH ESPEY	225/48700	8003

7590 05/20/2004

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EXAMINER

FOX, JOHN C

ART UNIT	PAPER NUMBER
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3753

DATE MAILED: 05/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/529,365

Applicant(s)

ESPEY, CHRISTOPH

Examiner

John Fox

Art Unit

3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-14 and 22-28 is/are pending in the application.
- 4a) Of the above claim(s) 10-14, 23, 25, 26 and 28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8, 9, 22, 24 and 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 3753

This action is responsive to the communication filed February 24, 2004.

Claims 1-7 and 15-21 have been cancelled.

Claims 10-14, 23, 25-26 and 28 are withdrawn from further consideration by the examiner, 37 C.F.R. 1.142(b) as being drawn to a nonelected species. Election of Species E was made without traverse in Paper No. 6.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 8-9, 24, 22 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon et al in view of Wich. Gordon et al show the claimed valve but does not disclose how the fuel pressure is regulated to inject fuel at the desired time and duration. Note that in Gordon et al the surface 17 is adjacent the step and fairly responds to the claim recitation of a guide surface. Wich shows a fuel injector system which uses a solenoid valve to regulate fuel pressure to the injector, which is actuated by fuel pressure in the same manner as Gordon et al. It would have been obvious for one of ordinary skill in the art to have used such a solenoid valve with the injector of Gordon et al to similarly regulate the fuel pressure seen by the injector. Such a combination can reasonably be described as an electrically actuated or activated (injector) valve.

Applicant's remarks have been fully considered but are not deemed persuasive. The flow of Gordon et al is homogenous due to the disclosed structure, which can reasonably be considered free of cavitation since cavitating fluid would be inhomogenous. The valve of Gordon et al thus fairly meets the claim.

Art Unit: 3753

Applicant's argument that claims 8 and 22 require the electrical activating device to move the valve is not understood. Claims 8 and 22 do not recite an electrical activating device. Using a solenoid pilot valve as Wich teaches is suggested by the references.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Fox whose telephone number is 703-308-2595. The examiner can normally be reached on Maximum Flextime.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherble can be reached on 703-308-1257. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3753

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John Fox
Primary Examiner
Art Unit 3753

This action is responsive to the communication filed October 8, 2003.

Claims 1-7 and 15-21 have been cancelled.

Claims 10-14 are withdrawn from further consideration by the examiner, 37 C.F.R. § 1.142(b) as being drawn to a nonelected species. Election of Species E was made without traverse in Paper No. 6.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 8-9 and 22 are rejected under 35 U.S.C. §102(b) as being anticipated by Bochland. Bochland shows a valve with valve member 16, bore 21, solenoid 25, and a valve head having a conical face 29 cooperating with a conical seat 32, which forms a contact surface, a step 33 and a guide surface 35. It is inherent to the Bochland valve that valve member 16 is guided in bore 21.

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and